

C-172S (N916CP, N991CP)
AIRPLANE QUESTIONNAIRE

Score: _____ Type/Model Aircraft: **C-172S (N916CP, N991CP)**

Complete this open book questionnaire using the *Flight Manual/Pilot's Operating Handbook*. If a question or part of a question is not applicable, write in NA. The check pilot will review and grade the questionnaire. Minimum passing score is 80%. The completed questionnaire will be filed in the pilot's flight records.

1. Approved fuel grades and colors are: **100 LL (Blue) / 100 (Green)**
2. Location/capacity of each fuel tank is: **Wings / 28 gal ea. (56 gal total)**
3. Total usable fuel under all flight conditions is gallons: **53 gal. (37 when filled to tabs)**
4. Endurance at 75% power, 7,500-foot MSL, with a 45-minute reserve is hours: **4.3 hrs.**
5. What make and grade oil is used? Winter: **15-50W (NCWG Standard)** Summer: **15-50W (NCWG Standard)**
6. Oil capacity is **8** quarts. Minimum oil quantity for take off is **5** quarts.
7. Minimum oil pressure is **20** psi. Maximum oil pressure is **115**.
8. Maximum oil temperature is **245** degrees (F or C) **F**.
9. Magnetos are checked at **1800** RPM. RPM drop should not exceed **150** RPM on either magneto or **50** RPM differential between magnetos.
10. Maximum RPM and MP for takeoff are **2700** and **N/A** in/Hg.
11. Maximum gross takeoff weight is **2550** pounds. Empty weight is _____ pounds.
Useful load is _____ pounds. Maximum landing weight is **2550** pounds.
12. Baggage compartment locations/weights are: **(1) 95" - 120 lbs (2) 123" - 50 lbs (120 max total)**
13. Give the IAS at **maximum gross** weight for:
 - a. Va (maneuvering speed). **105 KIAS**
 - b. Vso (stall, landing config, power. off). **40 KIAS**
 - c. Vs1 (stall, cruise config, power. off). **48 KIAS**
 - d. Vy (best rate of climb, sea level). **74 KIAS**
 - e. Vx (best angle of climb, sea level). **62 KIAS**
 - f. Vmc (minimum control speed – multiengine only). **N/A**
 - g. Best glide speed. **68 KIAS**
14. Give the immediate action/memory items for:
 - a. Engine failure immediately after takeoff.
AIRSPEED - 70 KIAS (flaps UP)
- 65 KIAS (flaps DOWN)

b. Fire during cranking and engine fails to start.

CRANKING -CONTINUE
THROTTLE – FULL OPEN
MIXTURE – IDLE CUT-OFF
CRANKING – CONTINUE
FUEL SHUTOFF VALVE – OFF (Pull Full Out)
AUXILIARY FUEL PUMP SWITCH - OFF

c. Engine fire in flight.

MIXTURE – IDLE CUT-OFF
FUEL SHUTOFF VALVE – PULL OUT (OFF)
AUXILIARY FUEL PUMP SWITCH - OFF
MASTER SWITCH – OFF

d. Electrical fire in flight.

MASTER SWITCH – OFF
VENTS,CABIN AIR,HEAT - CLOSED
FIRE EXTINGUISHER - ACTIVATE

15. Normal takeoff flap setting is 0-10 deg , short field takeoff setting is 10 deg , and soft field takeoff flap setting is 10 deg .

16. Maximum demonstrated takeoff/landing crosswind component is 15 knots.

17. Given: PA = 4,000 feet; Temp = 86o F; Runway 27; Wind 320o at 14 knots; runway is paved, level, and dry; aircraft is at maximum takeoff weight.

Find: Total takeoff distance to clear a 50-foot obstacle: 2416 ft .

18. Given: PA = 6,000 feet; Temp = 68o F; wind calm; runway is paved, level, and dry; aircraft is at maximum landing weight.

Find: Total landing distance to clear a 50-foot obstacle: 1580 ft .

19. Landing runway 22; wind 190o at 22 gusting to 30 knots. Will the maximum demonstrated crosswind component for this aircraft be exceeded? NO .